Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-20. (Cancelled)

21. (Currently Amended) A method comprising:

introducing particles of tetrabasic lead sulfate into a paste mix to form a paste material, the particles having ~~a generally spherical shape and~~ an average diameter of less than approximately 2.5 micrometers; ~~and~~

providing the paste material on a battery grid; and

curing the paste material at a temperature of less than approximately 48 degrees Celsius.

22. (Previously Presented) The method of Claim 21, wherein the particles have an average diameter of less than approximately 2 micrometers.

23. (Previously Presented) The method of Claim 21, wherein the particles have an average diameter of between approximately 1 and 2 micrometers.

24. (Cancelled)

25. (Currently Amended) The method of Claim [[24]] 21, wherein the curing step is performed at a humidity level of approximately 95%.

26. (Currently Amended) The method of Claim [[24]] 21, wherein the curing step is performed at a temperature of between approximately 46 and 48 degrees Celsius.

27. (Currently Amended) The method of Claim [[24]] 21, wherein the cured paste material includes tetrabasic lead sulfate crystals having a thickness of between approximately 2 and 5 micrometers.

28. (Previously Presented) The method of Claim 21, wherein the step of introducing particles of tetrabasic lead sulfate into a paste mix comprises adding the particles of tetrabasic lead sulfate at a loading level of between approximately 0.1 and 10.0 weight percent to the paste mix.

29. (Previously Presented) The method of Claim 21, further comprising milling tetrabasic lead sulfate to form the particles of tetrabasic lead sulfate before introducing the particles into the paste mix.

30. (Previously Presented) The method of Claim 29, wherein the step of milling tetrabasic lead sulfate utilizes a jet milling process.

31. (Currently Amended) A method of making a plate for a battery comprising:

mixing particles of tetrabasic lead sulfate having an average spherical particle diameter of less than approximately 2 micrometers with leady oxide to form a paste;

coating at least a portion of a battery grid with the paste; and

heating the battery grid and paste at a temperature of less than approximately 48 degrees Celsius to produce a battery plate having a cured paste thereon.

32. (Cancelled)

33. (Previously Presented) The method of Claim 31, wherein the particles have an average spherical particle diameter of approximately 1 micrometer.

34. (Previously Presented) The method of Claim 31, wherein the mixing step comprises adding the tetrabasic lead sulfate particles at a loading level of approximately 1 weight percent to the leady oxide.

35. (Previously Presented) The method of Claim 31, wherein the mixing step is performed at a temperature of less than approximately 60 degrees Celsius.

36. (Currently Amended) A method of making a battery comprising:

adding tetrabasic lead sulfate seed crystals having an average spherical particle diameter of less than approximately 2.5 micrometers to leady oxide to form a paste material;

coating at least a portion of a battery grid with the paste material;

curing the ~~battery grid and~~ paste material at a temperature of less than approximately 48 degrees Celsius to form a battery plate having a cured paste thereon;

providing the battery plate in a container to produce a battery; and

charging the battery.

37. (Previously Presented) The method of Claim 36, wherein the seed crystals have an average spherical particle diameter of between approximately 1 and 2 micrometers.

38. (Previously Presented) The method of Claim 36, wherein the cured paste includes tetrabasic lead sulfate crystals having a thickness of between approximately 2 and 5 micrometers.

39. (Previously Presented) The method of Claim 38, wherein the cured paste includes between 50 and 60 weight percent tetrabasic lead sulfate crystals after the curing step.

40. (Previously Presented) The method of Claim 36, wherein the curing step is performed at a temperature of between approximately 46 and 48 degrees Celsius.

41. (Previously Presented) The method of Claim 36, wherein the step of adding tetrabasic lead sulfate seed crystals comprises adding approximately 1 weight percent of the seed crystals to the leady oxide.

42-45. (Cancelled)

46. (New) The method of Claim 21, wherein the particles have a spherical shape.

47. (New) The method of Claim 21, wherein the average diameter of the particles is an average volume based spherical particle diameter.

48. (New) The method of Claim 47, wherein the average volume based spherical particle diameter is calculated by assuming that the particles are spherical to quantify the particle size.

49. (New) The method of Claim 21, further comprising adding at least one of water and sulfuric acid to the paste mix after introducing the particles of tetrabasic lead sulfate to form the paste material.

50. (New) The method of Claim 49, further comprising mixing the paste mix at a temperature of less than approximately 60 degrees Celsius.

51. (New) The method of Claim 21, wherein the particles of tetrabasic lead sulfate are seed crystals.

52. (New) The method of Claim 21, wherein the step of introducing particles of tetrabasic lead sulfate into a paste mix comprises adding approximately 24 pounds of tetrabasic lead sulfate seed crystals.

53. (New) The method of Claim 21, further comprising providing the battery grid in a battery and subjecting the battery to a formation process to convert the paste material to an active material on the battery grid.

54. (New) The method of Claim 29, further comprising determining the average diameter of the milled particles of tetrabasic lead sulfate.

55. (New) The method of Claim 54, wherein the step of determining the average diameter of the milled particles of tetrabasic lead sulfate utilizes a laser based particle size analyzer.

56. (New) The method of Claim 31, wherein the particles of tetrabasic lead sulfate are spherical.

57. (New) The method of Claim 31, wherein the mixing step further comprising adding particles of tetrabasic lead sulfate that have particle sizes greater than 2 micrometers to the leady oxide during the mixing operation.

58. (New) The method of Claim 31, wherein the mixing step comprises mixing a first group of seed crystals of tetrabasic lead sulfate that have particle sizes greater that 2 micrometers and a second group of seed crystals having particle sizes less than 2 micrometers with the leady oxide to form the paste.

59. (New) The method of Claim 58, wherein the second group of seed crystals have particle sizes between 10 and 20 micrometers.

60. (New) The method of Claim 31, wherein the average spherical particle diameter is an average volume based spherical particle diameter.

61. (New) The method of Claim 60, wherein the average volume based spherical particle diameter is calculated by assuming that the particles are spherical to quantify the particle size.

62. (New) The method of Claim 31, wherein the step of mixing particles of tetrabasic lead sulfate with leady oxide to form a paste comprises adding water and sulfuric acid.

63. (New) The method of Claim 31, wherein the particles of tetrabasic lead sulfate are seed crystals that are configured to develop into larger tetrabasic crystals.

64. (New) The method of Claim 31, wherein the step of mixing particles of tetrabasic lead sulfate with leady oxide comprises adding approximately 24 pounds of the particles of tetrabasic lead sulfate.

65. (New) The method of Claim 31, further comprising providing the battery grid in a battery and subjecting the battery to a formation process to convert the paste to an active material on the battery grid.

66. (New) The method of Claim 31, further comprising milling tetrabasic lead sulfate to form the particles of tetrabasic lead sulfate before mixing the particles of tetrabasic lead sulfate with the leady oxide.

67. (New) The method of Claim 66, further comprising determining the average diameter of the milled particles of tetrabasic lead sulfate.

68. (New) The method of Claim 67, wherein the step of determining the average diameter of the milled particles of tetrabasic lead sulfate utilizes a laser based particle size analyzer.

69. (New) The method of Claim 36, wherein the average spherical particle diameter is an average volume based spherical particle diameter that is calculated by assuming that irregular shaped particles are spherical to quantify the particle size.

70. (New) The method of Claim 36, wherein the step of adding tetrabasic lead sulfate seed crystals to leady oxide to form a paste material comprises adding water and sulfuric acid.

71. (New) The method of Claim 36, wherein the seed crystals are configured to develop into larger tetrabasic crystals.

72. (New) The method of Claim 36, wherein the step of charging the battery acts to convert the paste to an active material on the battery plate.

73. (New) The method of Claim 36, further comprising milling tetrabasic lead sulfate to form the tetrabasic lead sulfate seed crystals before adding the seed crystals to the leady oxide.

74. (New) The method of Claim 73, further comprising determining the average diameter of the milled tetrabasic lead sulfate seed crystals.